

CERES: Table of day and night derived GEO cloud properties

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Cloud Parameter (<u>a</u>)	GEO-daytime (b) (VIS & IR retrieval)	GEO-night time (c) (IR-only retrieval)
Cloud Fraction	X	X
Cloud Effective Pressure	X	X
Cloud Effective Temperature	X	X
Cloud Effective Height		
Cloud Top Pressure	X	
Cloud Base Pressure	X	
Cloud Phase	X	X
Liquid Water Path		
Ice Water Path		
Liquid Particle Radius		
Ice Particle Diameter		
Infrared Emissivity	X	
Cloud Optical Depth - Linear (d)	X	
Cloud Optical Depth - Log (e)	X	
Cloud Vertical Aspect Ratio		

- a. MODIS retrieves all the above listed cloud properties both day and night, except the vertical aspect ratio
- b. The GEO 2-channel routine assumes a 10µm particle radii and 60µm particle diameter
- c. The GEO 1-channel routine assumes a emissivity of unity
- d. Cloud optical depth is linearly spatially (footprint) averaged
- e. Cloud optical depth is logarithmically spatially (footprint) averaged